

Application No.: 10/731,923

REMARKS

Reconsideration of this application is respectfully requested.

By this Amendment, Applicant has amended the disclosure, amended claims 3, 10, and 16, and added new claims 21 – 25. Claims 1 – 25 are now pending in this application. No new matter has been introduced into the application by this Amendment. The Amendment results in additional claim fees being due, which fees may be charged to deposit account 03-1129. A fee transmittal sheet is attached.

In the office action dated October 18, 2004, the examiner raised various formality objections to the specification, which are addressed by amendments to the disclosure presented above. Namely, the disclosure is amended to include replacement paragraphs 3, 19, and 22 and a new Abstract. The amendments presented above overcome each of the examiner's objections.

Claims 3, 10, and 16 are amended to correct informalities not noted by the examiner, namely to correct a lack of antecedent basis for the limitation "the longitudinal axis". Although the correct may not be necessary due to the inherency of a longitudinal axis, the form of the claim is improved.

The amendments set forth above are made solely to address the informalities, add no new matter, and in no way narrow the scope of any claims.

The examiner rejected claims 1 – 14 under 35 USC 102(b) as being anticipated by Graziadei (US 5,076,218). The examiner made no reference in the office action to pending claims 15 – 20. On October 27, 2004, counsel submitted a written request by fax for issuance of a replacement office action, on the basis that the office action dated October 18, 2004, appeared to be incomplete for failure to allow, reject, or otherwise address claims 15 – 20. Counsel contacted the examiner by telephone several weeks after the written request to reiterate the request for issuance of a new office action. The applicant has received no new office action. Accordingly, for purposes of responding to the office action, counsel will treat

Application No.: 10/731,923

claims 15 – 20 as having been allowed or considered allowable by the examiner. The examiner's rejection of claims 1 – 14 is traversed below.

Claim 1 recites an air induction arrangement for an internal combustion engine comprising an inlet manifold having a first cylinder port and at least a second cylinder port. A feed passage has an opening within the inlet manifold, the opening having a periphery. A first portion of the periphery of the feed passage opening is distal to the first of the cylinder ports, and a second portion of the periphery of the feed passage opening is proximal to the first of the cylinder ports. The first portion of the periphery of the feed passage opening protrudes further into the inlet manifold than said second portion of the periphery of the feed passage opening.

The examiner asserted that Graziadei anticipates claim 1 – 14 and makes specific reference to Figures 4 – 6, 8, and 10 of Graziadei. However, this examiner did not relate any specific limitations of Graziadei to allegedly corresponding elements of the structure set forth in applicant's claims. As will be explained below, Graziadei does not disclose each and every limitation of claim 1 or its dependent claims 2 – 7, 18, and 21 – 23.

Graziadei is directed to a manifold specifically designed to increase the linear velocity of a fuel-air mixture entering a reed valve cage in a 2-stroke engine. Graziadei discloses an intake manifold 5 that receives a fuel-air mixture from a carburetor 2, the air-fuel mixture entering the manifold 5 through an inlet 11 best shown in Fig. 3 of Graziadei. The air-fuel mixtures travels through the manifold 5 to ports 8 and 8' and then past manifold extensions 16 and 16' that effect a reduced cross-sectional area into the interior of reed valve cages 9 and 9'. Notably, the reed valve cages 9 and 9' do not form part of the intake manifold 5. The reduced cross-sectional area resulting from the manifold extensions 16 and 16' increases the linear velocity of the fuel-air mixture, which produces broader power band and greater throttle response according to Graziadei.

Application No.: 10/731,923

Graziadei does not disclose or even suggest an arrangement as set forth in claim 1 wherein a feed passage has an opening within the inlet manifold where the periphery of the opening has first portion distal to the first cylinder port and second portion proximal to the first cylinder port with the first portion protruding further into the inlet manifold than the second portion. Graziadei has no feed passage with any opening within the inlet manifold. As explained above, the air-fuel mixture of Graziadei is fed into the Graziadei intake manifold 5 through the inlet 11 thereof – no feed passage has any opening within the Graziadei intake manifold 5.

The examiner has not identified specific elements in Graziadei that are asserted to correspond to limitations in claim 1. Any reliance on manifold extensions 16, 16' of Graziadei is misplaced, as these extensions protrude from the Graziadei intake manifold 5 rather than into the intake manifold 5. Thus, the manifold extension 16, 16' cannot be considered to form a feed passage as recited in claim 1 wherein the feed passage has an opening within the inlet manifold. Notably, the reed valve cages 9, 9' of Graziadei do not form part of the intake manifold 5 and cannot in any way be considered a manifold as set forth in claim 1, since for example, a reed valve cage as shown in Graziadei does not have a first cylinder port and at least a second cylinder port as recited in claim 1 and in any case a reed valve cage does not perform the function of an "inlet manifold" as set forth in applicant's claims.

As explained, Graziadei does not disclose each and every feature of claim 1 and its dependent claims, so the examiner's rejection of such claims should be withdrawn. Moreover, Graziadei fails to disclose various features set forth in the dependent claims. For example and without limitation, Graziadei does not disclosure a feed passage that is a tubular member having an end surface as recited in claim 2 or cut at an angle as recited in claim 3, or that the periphery of the feed passage has an elliptical shape as set forth in claim 4, or that the feed passage comprises an elbow as set forth in claim 5, or that the inlet air feed passage is located partially outside of the inlet manifold as set forth in claims 22 and

Application No.: 10/731,923

23. Graziadei also fails to disclose the method of claim 18, which depends from claim 1 and which was not addressed by the examiner (assumed to be allowable), inasmuch as Graziadei does not disclose the air induction arrangement of claim 1 and is not in any way directed to reducing particle emissions from the combustion of air and fuel (as explained above, Graziadei is directed to broadening the engine's power band and improving throttle response).

Claim 8 recites an air induction arrangement for an internal combustion engine, comprising an inlet manifold having a plurality of cylinder ports and a feed passage having an opening within the inlet manifold. The feed passage opening is formed such as to hinder air departing from the feed passage opening from travelling away from the cylinder ports. The examiner asserted that Graziadei also anticipates claim 8 and its dependent claims 9 – 13 (notably, the examiner did not reject or otherwise address claim 19, which depends from claim 8). However, the examiner made no effort to relate the Graziadei disclosure to the limitations set forth in claim 8 and, moreover, the examiner's application of Graziadei to the claims appears to be directed solely to the limitations of claim 1 rather than claim 8.

Nonetheless, Graziadei fails to anticipate claim 8 as asserted by the examiner. Nothing in Graziadei teach or even suggested an air induction arrangement having a feed passage where a feed passage opening within the inlet manifold is formed to hinder air from traveling away from the cylinder ports of the inlet manifold. For this reason alone, Graziadei does not anticipate claim 8 and its dependent claims and the examiner's rejection should be withdrawn. Moreover, dependent claims 9 – 13 recite additional limitations that are not disclosed or even suggested by Graziadei.

Claim 14 is similar to claim 8 but utilized means-plus-function language in accordance with 35 USC 112, par. 6. Graziadei does not disclose or suggest any structure for carrying out the recited function of hindering air departing from the feed passage from traveling away from the inlet manifold cylinder port and certainly does not disclose any of the corresponding structures from applicant's disclosure or an equivalent of such structures.

Application No.: 10/731,923

Accordingly, Graziadei does not anticipate claim 14 or is dependent claims, namely claims 15 – 17 and 20 that were not rejected or otherwise addressed by the examiner. Further, claim 15 – 17 and 20 recite additional limitations that are not disclosed by Graziadei.

With regard to unaddressed method claims 18 – 20, the examiner will note that these claims depend respectively from claims 1, 8, and 14 and are thus allowable for the reasons set forth above with regard to their respective parent claims. Furthermore, each of claims 18 – 20 recited a method step of "reducing particle emission from said combustion step", which is not a feature disclosed by Graziadei since Graziadei is directed to broadening the power band and improving throttle response in a 2-stroke engine.

Claims 21 – 25 are new. Claim 21 recites – for improved clarity and avoidance of doubt – that the feed passage feeds air into the inlet manifold. Claims 22 and 23 recite that the feed passage is partially located outside of the inlet manifold. The features of claim 21 – 23 are not disclosed or suggested by Graziadei. New claim 24 is not anticipated by Graziadei because, for example and without limitation, claim 24 recites a feed passage having an opening within an interior space of the inlet manifold, which is not taught by Graziadei, and further because such a feed passage opening having a configuration as recited in claim 25 is not taught or suggested by Graziadei. Claim 25 depends from claim 24 and recites additional limitations not taught or suggested by Graziadei.

Application No.: 10/731,923

The office action contains characterizations of the claims and the related art with which applicant does not necessarily agree. Unless expressly noted otherwise, applicant declines to subscribe to any statement or characterization in the office action.

In view of the remarks and amendments set forth above, this application is considered in condition for allowance. Prompt and favorable action is requested.

Respectfully submitted,

Dated: January 18, 2005

By: John Cheek
John J. Cheek
Reg. No. 39,628

Tel. (309) 675-8023